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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,637	10/18/2001	Richard H. Thompson III	DRC0001	9979
25235	7590	09/28/2005		
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEENTH ST DENVER, CO 80202				
			EXAMINER BARNIE, REXFORD N	
			ART UNIT 2643	PAPER NUMBER

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/007,637	<b>Applicant(s)</b> THOMPSON ET AL.	
	<b>Examiner</b> REXFORD N. BARNIE	<b>Art Unit</b> 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 21-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**REXFORD BARNIE**  
**PRIMARY EXAMINER**

#### Attachment(s)

- |  |  |
|--|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|--|--|

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (US Pat# 6,813,488) in view of Thomas et al. (US Pat# 6,487,283) or Eng et al. (US 2002/0101967) or Mijares et al. (US Pat# 6,330,311).

**Regarding claim1**, Marsh teaches a system and method for determining optimal wireless communication service plans for a plurality of subscribers or users in (see col. 7 lines 35-44, col. 8 lines 45-58) comprising: accessing a database of a user's call detail record (see cols. 9-10, col. 13), determining average usage (see col. 17), creating a list of service providers plans available from communication service providers and performing a plan cost analysis and then making a recommendation in (see cols. 8-10, col. 2, col. 13, col. 16, col. 33). Furthermore, according to Marsh, average usage for the calling record profile, which would include all calls either toll or local (unbilled) data information such as airtime consumed in (see col. 17 lines 1-15 in light of call profiles (360), col. 9 lines 31-36, col. 14 lines 31-43 and col. 21 lines 56-62)

Marsh fails to teach organizing or arranging service plans in order of calculated plan cost.

Thomas teaches a communication system where service providers can be analyzed for reasons including quality of service and then ranking service providers in any order desired including least cost in (see col. 9).

Eng teaches a telecommunications system wherein service plans/providers can be ranked in view of lowest rates or cost in (see fig. 6C).

Mijares teaches a communication system with least cost routing or service plans wherein service providers can be recommended or displayed in order of plan cost in (see col. 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of either secondary reference into that of Marsh thus making it possible to read and select a least cost provider efficiently without difficulty.

**Regarding claims 5-7,** The combination including Marsh teaches the claimed subject in (see cols. 8-10, col. 16, cols. 17-20, col. 23 line 35-col. 24 line 28, col. 33). Marsh teaches or implies from these columns that all analyzed service plans would be chosen among a plurality of plans for plan efficiency suitable for a user.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (US Pat# 6,813,488) in view of Thomas et al. (US Pat# 6,487,283) or Eng et al. (US 2002/0101967) or Mijares et al. (US Pat# 6,330,311) and further in view of Philips et al. (US Pat# 6,728,352).

**Regarding claim 8**, The combination including Marsh teaches being able to receive data from carriers in (see col. 8 line 66-col. 9 line 18) but fails to teach receiving information from a plurality of service provider (different switching elements) and compiling data in a suitable format.

Philips teaches a communication system which can accommodate a plurality of switches (see col. 7 lines 40-50) including analog or digital switches wherein usage data collected by these service providers can be through a parser (see col. 11 lines 55-65, col. 12) and eventually to a database in (see fig. 7, fig. 5). The usage data can be gathered and analyzed and presented to a user on a user interface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Philips into that of the combination thus making it possible to accommodate a plurality of service provider, gather call statistics and analyze them accordingly automatically in an efficient manner without manual input.

**Regarding claim 9**, The combination including Philips teaches a centralized parser but the ability to use a centralized element or distributed elements for the same functionality can be done to accommodate a plurality of resources.

**Regarding claim 10**, The combination including Philip teaches generating text files from a plurality of raw data using element including the parser.

Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (US Pat# 6,813,488) in view of Larkins (US Pat# 6,295,291).

**Regarding claim 21**, Marsh teaches a method in a computer system for managing wireless communication devices usage comprising:

storing employee information, device information and existing carrier and carrier service plan information received from the client (subscriber or employer) (see col. 7, col. 8 lines 46-58, col. 8 line 66-67) which implies that each employee would have an existing service plan associated with their terminal, his/her account and calling profile data;

processing billing information from the existing carriers to determine usage for the devices based on call detail records in the billing information in (see col. 8 line 66- col. 9 line 18, cols. 7-8);

determining a set of preferred plans from a set of available plans for each of the devices based on the determined usage, wherein the usage includes call detail record and then preparing reports including cost and usage summaries for each subscriber (device) and including the determined set of plans in (see col. 8 lines 45-58, col. 7 lines 14-34, **lines 35-44**, col. 16 lines 21-43). Note that since each calling party (subscriber or device) would have a different calling pattern based on which a service plan

recommendation would be made, a plurality of subscribers would have different calling plans recommended as such.

Marsh teaches removing any service plans from the list suitable for a user in (see col. 8 lines 18-39, col. 16 lines 21-42)

Marsh teaches being able to using a zip code and other factors (cost minimization) in (see col. 7 lines 34-44) and an analysis parameters for choosing service plans which includes a minimum saving filter in (see col. 23 lines 35-col. 24 line 29) when determining service plans but Marsh fails to teach a subscriber specifying parameters which plays a factors in choosing or recommending service plans.

The applicant does not define the analysis parameters.

It's notoriously well known to specify to a service provider what service and features are desired based on which a service package(s) can be selected which includes 1-800 numbers for businesses, discount packages, family packages and so forth for business, families

For the sake of argument, Larkins teaches a radio telephone service wherein analysis parameters read by the examiner to include features to be associated with a service plan can play a factor in one's bill or cost in (see col. 2 lines 53-60 ad fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Larkins into that of Marsh thus providing a user with a service plan based on the needs of the user or subscriber(s) such as features desired, well known, and also, to reduce or minimize cost by offering user incentives as means of enticing or attracting customers.

**Regarding claims 22-23**, see the explanation as set forth above and (col. 24 of Marsh). It's known to be able to access usage data over a computer network.

**Regarding claim 24**, The examiner takes official notice that fraud alert based on exceeding usage threshold levels such as making calls to certain countries, too many calls within a certain time frame, delinquent account and so forth is notoriously well known in the art.

**Regarding claim 25**, The combination including Marsh teaches calculating a suitable plan for a plurality of subscribers and not one subscriber as alleged by the applicant in (see col. 7 lines 15-44, col. 8 lines 45-58, col. 23 lines 35-38, col. 33 lines 8-35 of Marsh).

**Regarding claim 26**, the combination teaches being able to use calling patterns, zip codes, features and so forth in determining cost thus making it possible to create distinct cost plans, zip codes for instance can vary for a plurality of users in different geographical regions. Furthermore, the analysis parameters defined for each user would obviously be distinct for a plurality of users in (see col. 23-24), minimum saving filter.



Claims 27 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (US Pat# 6,813,488) in view of Philips et al. (US Pat# 6,728,352).

**Regarding claim 27**, Marsh teaches a method for creating communication service plan recommendations for a client for selection of service plans from a plurality of communication service providers on a device-by-device basis (subscriber by subscriber basis) comprising:

receiving billing and usage data and storing them in a memory in (see col. 8 lines 66-col. 9 line 18);

accessing billing files in the memory device to identify a set of the client communication devices (group accounts) in (see col. 8 lines 45—58, col. 7) and according to (see cols 7-8), the service provider can be the same carrier in 9see col. 8 lines 50-52) or a plurality of carriers in (see col. 9 line 3);

determining the average usage of each devices; creating a list of service plans available from service provider, calculating a plan cost and making a recommendation ins taught by Marsh in (see cols. 7-8, col. 9 lines 51-65, col. 13 lines 1-21, col. 14 lines 31-43, col. 16 lines 21-43, col. 17 lines 17-20).

Marsh teaches the possibility of being able to receive data from a plurality of service providers in (see col. 9) but fails to teach that data from a plurality of carriers or service providers can be converted into a single format using a parser.

Philips teaches a communication system which can accommodate a plurality of switches (see col. 7 lines 40-50) including analog or digital switches wherein usage data collected by these service providers can be through a parser (see col. 11 lines 55-65,

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col. 12) and eventually to a database in (see fig. 7, fig. 5). The usage data can be gathered and analyzed and presented to a user on a user interface. Philips teaches being able to format data into a common format from a plurality of carriers wherein this data would be usage data in (see figs., col. 11 lines 55-65, col. 12 lines 49-67 and col. 7 lines 40-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Philips into that of the combination thus making it possible to accommodate a plurality of service provider, gather call statistics and analyze them accordingly automatically in an efficient manner without manual input.

**Regarding claims 29 and 30**, the combination including Marsh teaches determining from a set of available service plans which plans would be suitable for a subscriber based on calling patterns in (see col. 16 lines 21-42, col. 24).

**Regarding claim 31**, the combination including Marsh teaches using saving filter as part of an Analysis parameters in (see col. 23 lines 35-col. 24 line 28 of Marsh).

**Regarding claim 32**, the combination teaches parsing through raw data and generating ext information, which can be displayed on a user interface. Philips is directed to usage data.

Claims 1, 3, 4 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. (US Pat# 5,027,388) in view of Thomas et al. (US Pat# 6,487,283) or Eng et al. (US 2002/0101967) or Mijares et al. (US Pat# 6,330,311).

**Regarding claim 1**, Bradshaw teaches a method of selecting the most cost effective service plan provided by cellular resellers to customers or subscribers comprising of

accessing billing files to identify a plurality of client devices wherein the billing files includes a call detail record in (see col. 2 lines 40-49; fig. 1 @ 102, 130-146, call detail record of (figs. 3-4) call detail record in (see figs. 3-8)

determining average usage of each of the communication devices wherein average use includes determining actual time for the calls made with the device in (see col. 8, 805+806 of fig. 8) and unbilled usage time;

creating a list of service plans, calculating cost and generating a recommendation to a subscriber in (see col. 8, fig. 1 follow arrows from (130-146), col. 3 line 67-col. 4 line 2, col. 8-9). The overall user time is gathered whenever phone is used thus making it a general airtime usage data.

Bradshaw fails to teach organizing or arranging service plans in order of calculated plan cost.

Thomas teaches a communication system where service providers can be analyzed for reasons including quality of service and then ranking service providers in any order desired including least cost in (see col. 9).

Eng teaches a telecommunications system wherein service plans/providers can be ranked in view of lowest rates or cost in (see fig. 6C).

Mijares teaches a communication system with least cost routing or service plans wherein service providers can be recommended or displayed in order of plan cost in (see col. 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of either secondary reference into that of Marsh thus making it possible to read and select a least cost provider efficiently without difficulty.

**Regarding claims 3 and 4**, The combination including Bradshaw teaches average use determining average call duration and a range of call durations in (see fig. 10A @ 943, 944, 945, 949, 950, 951 of fig. 10A, col. 8, col. 6 lines 10-30).

**Regarding claim 27**, Bradshaw teaches a communication system capable of performing the steps including:

receiving billing and usage data from each carrier providers in (see col. 3 lines 13-25);

processing the data and storing the information in a memory and accessing the billing files to identify a set of communication devices based on billing records in (see col. 3 lines 13-col. 4 line 20);

determining average usage of a subscriber for each of its users, calculating a plan cost and making a recommendation in (see col. 8, col. 9 lines 19-32, Table 1, , fig.

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1 @ 102, 130-146, figs. 3-4, 152 @fig. 7, 804-806 @fig. 8, fig. 8A, col. 1 lines 44-59, fig. 10 and fig. 11).

Bradshaw fails to teach usage of a parser which receives usage data from a plurality of carriers or sources and then formatting data into a common format.

Philips teaches a communication system which can accommodate a plurality of switches (see col. 7 lines 40-50) including analog or digital switches wherein usage data collected by these service providers can be through a parser (see col. 11 lines 55-65, col. 12) and eventually to a database in (see fig. 7, fig. 5). The usage data can be gathered and analyzed and presented to a user on a user interface. Philips teaches being able to format data into a common format from a plurality of carriers wherein this data would be usage data in (see figs., col. 11 lines 55-65, col. 12 lines 49-67 and col. 7 lines 40-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Philips into that of the combination thus making it possible to accommodate a plurality of service provider, gather call statistics and analyze them accordingly automatically in an efficient manner without manual input.

**Regarding claim 28,** The combination including Bradshaw teaches average use determining average call duration and a range of call durations in (see fig. 10A @ 943, 944, 945, 949, 950, 951 of fig. 10A, col. 8, col. 6 lines 10-30).

### ***Response to Arguments***

Applicant's arguments filed on 07/09/2005 have been fully considered but they are not persuasive.

The applicant argued that the applicant argued that the prior art of record (Marsh) fails to teach a plurality of client communication devices and does not teach analyzing a plurality of billing files for a plurality of devices, average usage of each device and then making a recommendation.

The examiner disagrees with the applicant because according to (Marsh), his invention applies to an individual subscriber or an employer who can have a plurality of phone lines assigned to its employees and making a recommendation as to what service plan(s) would be suitable to each of the devices based on usage patterns can be applied to either in (see col. 7 line 14-44, col. 8 lines 46-58).

The applicant argued that the prior art of record fails to teach factoring in unbilled usage in (see page 13 of arguments).

The examiner disagrees because Marsh teaches both toll or local usage can be used when determined a service plan suitable for a client in (see col. 7 lines 52—53, col. 9 line 36 and so forth). Furthermore, according to marsh, actual usage can be gathered including monthly minutes in (see Table 5, col. 21 and so forth).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is 571-272-7492. The examiner can normally be reached on M-F 9:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER  
REXFORD BARNIE  
09/20/05

  
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